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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,100	09/30/2005	Vincent Shanni	HOM-1(C1)	4185

54630 7590 01/06/2009

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EXAMINER	
HOLLOWAY, JASON R	

ART UNIT	PAPER NUMBER
3633	

MAIL DATE	DELIVERY MODE
01/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,100	SHANNI, VINCENT	
	Examiner	Art Unit	
	JASON HOLLOWAY	3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *30 September 2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is a first Office Action Non-Final rejection on the merits. Claims 1-37, as originally filed, are currently pending and have been considered below.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show how the steel channel beams as described in the specification and figures 8A, 8B, 9 and 10 relate to drawings 1-7. The beams are claimed as part of the structure, but it is impossible to ascertain where in drawing figures 1-7 the beams of figures 8A, 8B, 9 and 10 are located.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second sub-core of claim 23 must be shown or the feature canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 10 and 23 are objected to because of the following informalities:

Regarding claim 10, the recitation "…the core roof section comprises a plurality of further comprises a plurality of metal…" should be changed to delete the duplication of the word "comprises."

Regarding claim 23, lines 6-19 on page 40 and lines 14-27 on page 41 are exact duplications of the same limitations.

Appropriate correction is required.

Double Patenting

4. Applicant is advised that should claims 31-33 be found allowable, claims 34-36 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colvin, Jr. (4,660,332) (herein Colvin) in view of Nystrom et al. (3,146,864) (herein Nystrom).

Regarding claims 1, 12 and 23, Colvin teaches a multi-story prefabricated folding structure comprising:

a generally rectangular central core (5 of figures 1 and 2) and a sub-core attached under the central core (sub-core is illustrated in figure 17; all the components of the central core are included in the sub-core) comprising a plurality of core walls (22-28, figures 6-8 and 10-13), a core floor section (41) connected to and extending between the core walls at a base of the core walls (as illustrated in figures 6-8 and 10-13), and a core roof section connected to and over the core walls and over the core floor section (roof sections as illustrated in figures 7, 11 and 13);

a plurality of folding rooms and a plurality of folding sub-rooms (folding sub-rooms via figure 17; all the components of the folding rooms are included in the folding sub-rooms), attached to the central core; each folding room comprising a plurality of room wall members (71 and 72 figures 6-8 and 10-13), a folding room floor section (folding floor members 61 and 62) and sub-floor section (sub-floors as illustrated in figure 17 comprise all the components of the main floor section) removably attached to and extending between the room walls at a base of the room walls and a folding a room roof section (folding ceiling sections 81 and 82) removably attached to and extending over the room wall members and extending over the room floor section (as illustrated in figures 6-8, 11 and 13); each of the room wall members, the room floor section and the

room roof section comprising a plurality of spaced beams having at least one flat side (figure 5 illustrates floor joists 411 and 413, ceiling joists 402, and studs 273 each have at least one flat side and are spaced from each other).

at least one said room floor section (61, 62) being pivotally connected (via pivot 2 of figures 6-8) at one end thereof to said core floor section (core section 41) (column 3 lines 30-32); at least said one room roof section being pivotally connected at one end thereof to said core roof section (as illustrated in figures 2 and 6-8 the roof is pivotally connected to core); said room wall members being removably attached (via nut and bolt at pivot 3) to said room floor section and said room roof section; each room roof section (81 and 82) being pivotally connected to the core roof section (50-54) on the same side of the central core as each room floor section is connected to the core floor section (as illustrated in figures 2 and 6-8 roof is pivotally connected to core on the same side as the floor section);

wherein each folding room floor section and sub-floor section and each folding room roof section are capable of being alternately detached from its room wall members and pivoted inwardly toward said central core or central sub-core and positioned in close proximity to and substantially parallel to a corresponding core wall or sub-core wall and thereby form a compact folded structure (as illustrated in compacted folded structure of figures 2 and 6), or pivoted outwardly away from said central core to define a room adjacent to said central core when attached to its room wall members (as illustrated in figures 6-8, 11, 13 and 17);

However, Colvin fails to explicitly disclose a second sub-core (i.e. a third story) having all the limitations of the core and the sub-core. It would have been obvious to one of ordinary skill in the art to provide a second sub-core or third story to the invention of Colvin in order to provide additional living space to the residential building. Further, it would have been obvious to provide a third story to the invention of Colvin since it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced (*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)).

Further, Colvin fails to explicitly disclose each of said core and sub-core walls, core and sub-core floor sections and core roof section comprise a plurality of metal channel beams (instead, Colvin discloses wooden beams).

Nystrom teaches a metal building having metal channel beams (70, 75, 76, 98; figures 1, 3-5, 9-13 and 17-19).

Therefore, from the teaching of Nystrom, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the wooden beams of Colvin with the metal channel beams of Nystrom to provide stronger support to the folding structure.

Regarding claims 2, 13 and 24, the combination of Colvin and Nystrom teaches the beams comprise steel (column 6 lines 33-36 of Nystrom).

Regarding claims 3, 14 and 25, Colvin teaches the beams pivot around bolts (beams pivot about pivots 2-4 as illustrated in figures 2, 3, 6-8, 11, 13, 16 and 17).

Regarding claims 4, 15 and 26, the combination of Colvin and Nystrom teaches the beams have a generally U-shaped cross-section with a wide flat side extending to opposite perpendicular edges (the beams 70, 75, 76, 98 of Nystrom have U-shaped cross sections with a flat side; as illustrated figures 1, 3-5, 9-13 and 17-19).

Regarding claims 5, 16 and 27, the combination of Colvin and Nystrom teaches the beams have a generally C-shaped cross-section with a wide flat side extending to opposite perpendicular edges having perpendicularly inwardly positioned edge flanges (the beams 70, 75, 76, 98 of Nystrom have C-shaped cross sections with a flat side and inwardly positioned edge flanges 100A; as illustrated figures 1, 3-5, 9-13 and 17-19).

Regarding claims 6, 17 and 28, the combination of Colvin and Nystrom teaches adjacent beams are positioned with their respective wide flat sides in juxtaposition and said beams being attached together with a plurality of bolts and nuts (the beams 70, 75, 76, 98 of Nystrom are juxtaposed and attached via nuts and bolts; as illustrated figures 1, 3-5, 9-13 and 17-19).

Regarding claims 7, 18 and 29, the combination of Colvin and Nystrom teaches the core walls, room wall members, sub-core walls, sub-room wall members, second sub-core walls, and second sub-room wall members further comprise a plurality of spaced metal channel studs having at least one flat side (via columns 10, 75 and 76 of Nystrom; as illustrated figures 1, 4 and 9-13).

Regarding claims 8, 9, 19, 20, 30, 31 and 34, the combination of Colvin and Nystrom teaches a plurality of rafters (via truss 31 and folding roof sections 50-54), said rafters comprising a pair of metal channel beams having at least one flat side (metal

channel rafter beams via rafter elements 40 and 41 as illustrated in figure 19 of Nystrom), and which pair of beams are attached together at one end of each of said beams via at least one bolt and nut (as illustrated in figure 19 of Nystrom; the rafter beams of Colvin are also attached via nuts and bolts), one of said rafter beams being notched and the other of said rafter beams being positioned within the notch such that said rafter beams are interlocking with one another (figures 17-19 of Nystrom illustrate the interlocking process of connecting rafter beams 40 and 41 together via notches 48 and 48A and threaded fasteners 50);

and each room roof section being pivotally connected to the core roof section via an end of a rafter beam on the same side of the central core as each room floor section is connected to the core floor section (as illustrated in figures 6-8, 10-13 and 17 of Colvin, the room roof sections are pivotally connected in the manner as claimed by Applicant).

Regarding claims 10, 21, 32, and 35, the combination of Colvin and Nystrom teaches a plurality of metal channel core roof section supports, each one of said core roof section supports being positioned within a notch in one of the rafters (figures 4 and 5 of Nystrom illustrate a rafter assembly having a notch in which metal channel support member is inserted) and attached to said rafter via at least one bolt and nut such that said supports and said rafter beams are interlocking with one another (column 4 line 70 to column 5 line 10 of Nystrom teaches the fastening of support columns to rafters of figures 4 and 5 via suitable fasteners inserted through the holes. It would be obvious to use nuts and bolts as the suitable fasteners).

Regarding claims 11, 22, 33 and 36, the combination of Colvin and Nystrom teaches a plurality of metal channel room roof section supports (metal channel beams via Nystrom), each room roof section being pivotally connected to the core roof section by pivotally connecting each of the room roof section supports by a bolt and nut to one of said rafter beams (as illustrated in figures 2, 3, 6-8 and 10-13 of Colvin, room roof sections are pivotally connected to core roof sections via pivots 2-4 which comprise a bolt and nut).

7. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colvin, Jr. (4,660,332) in view of Nystrom et al. (3,146,864) further in view of Smith (5,461,832).

Regarding claim 37, the combination of Colvin and Nystrom teaches a process of prefabricating a folding structure as described above in the preceding claim rejections of claims 1-36, however, the combination of Colvin and Nystrom fails to explicitly disclose a trailer which comprises a rectangular framework, which framework is disposed on at least four wheels, an upper edge of the rectangular framework comprising a channel around a periphery of the framework and forming a habitable structure on the trailer.

Smith teaches a transportable foldable building which comprises a rectangular framework (as illustrated in figure 1), which framework is disposed on at least four wheels (four wheels illustrated in figures 4 and 7-10), an upper edge of the rectangular framework comprising a channel around a periphery of the framework (column 6 lines 48-50 teaches the trailer includes channel brackets on opposing sides of the trailer in

order to facilitate construction of the building) and forming a habitable structure on the trailer (column 1 lines 43-45 and column 3 lines 37-46 teaches the building is built on the trailer).

Therefore, from the teaching of Smith, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the folding structure of the combination of Colvin and Nystrom to include a trailer as taught by Smith in order to provide a transport means which eliminates the step of placing a structure onto a trailer thereby reducing costs and manufacturing time.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Colvin (4,545,171) teaches a prefabricated folding residential structure.

Bridges et al. (5,706,615) teaches a modular structure built on a platform comprising caster wheels.

Hosterman et al. (6,434,895) teaches a folding building built on a trailer.

Von Hoff et al. (5,950,373) teaches a multi-story dwelling which is transported by a trailer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON HOLLOWAY whose telephone number is (571) 270-5786. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JASON HOLLOWAY
Examiner
Art Unit 3633

JH

/Brian E. Glessner/
Supervisory Patent Examiner, Art Unit 3633